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AROUND THE LAKES.

CLEVELAND.

The Fortier barges, the Mills and Sherman have been sold for $31,000.

Mr. James McGrath assumed the duties of local inspector of boilers March 12.

Engineer E. W. Prince left Monday for Milwaukee to fit out the propeller Rust.

Gaptain Woodruff of the schooner Rhodes has bought the schooner E. C. Williams. Price $7,500.

Captain W. D. Robinson supervising inspector of steam vessels of this district was in the city last Saturday.

Captain Cowley, last season master of the Rust, will sail a lumber barge between Ludington and Chicago this season.

Moore & Bartow's steamer, under construction at Radcliffe's yard is now well under way. The frames will all be up by the first of April.

Steamer Cumberland received extensive repairs at Buffalo. New condenser new smokestacks, new Trout wheel, extensive repairs to machinery.

We have received a communication from "E. B." which we cannot print without being informed of two essentials, the name of the mate referred to by the writer and the writer's name.

At Globe drydock have been finished the repairs on the Sumatra, consisting of new stem, hatch combings and bottom calked. She went out of dock, giving place to the propeller Oscar Townsend for new shaft and Trout wheel.

The Cleveland Seamen's union has elected officers for the ensuing year as follows: President, Peter Lynch; vice presidents, Michael Howlett, Thomas Sinclair; secretary, Peter Hanson. This is Mr. Lynch's fourth term as president.

W. H. Prince for thirteen years engineer of the Sheldon, has been transfered to the Chamberlain and left yesterday for Chicago to get his new charge ready for the opening. During Mr. Prince's thirteen years service on the Sheldon he has not missed a trip.

Engineer S. A. Wells has gone to Chicago to fit out the propeller Wm. Edwards. The engine has received some improvement at the hands of the Globe Iron Works, which Mr. Well's thinks will add to her capabilities about 10 per cent.

Captain B. A. Stanard, local inspector of hulls for the past thirty four years, has resigned, to take effect April 1st. Captain Stannard is the oldest inspector in the service. His was one of the appointments made at the time the inspection laws went into force in 1852.

The new steel steamer at the Globe shipyard for Captain Wilson is fast assuming symmetry. The frames are all up, and the steel plate, which is being furnished by the Brittain Iron and Steel Co. of this city, is arriving daily in sufficent quantities to push the work rapidly. The forging of shafts, cranks, etc., is being done by the Cleveland City Forge Co.

Captain Henry Brock, for two years vessel agent at this port has been appointed master of the schooner Fred Kelley. We made a premature statement some weeks since on what we deemed good authority that Captain Will Pringle had been appointed to the Kelley. The note was based on the purchase by Cleveland parties of the Siberia, and as all things did not transpire as ordered we were led into the mistake.

The appointments for the Cleveland Transportation Company have been made and are as follows: Sparta, Captain William W. Cumming; engineer, Henry McGinness; Sumatra, Captain William Russell. Havana, John Hall, last season in the steamer New York, of the Erie line; engineer, M. Taylor; Helena, Captain Thomas Armstrong. Vienna, Captain W. C. Goodsell; Verona, Captain J. A. Hargenrother; Genoa, Captain J. W. Nicolson, Oscar Townsend, Captain William Humphrey; Ed. Kelley, Captain Henry Brock; schooner L. Hanna, Captain N. L. Sherwood.

The Havana Helena, Sparta and Sumatra have been chartered by Todd, Stambaugh & Company, coal, Cleveland to Chicago, 70 cents. The Helena was towed up the river Monday to their dock above the C. C. C. & I. railroad bridge to load. The Sumatra, which came out of drydoek yesterday, will tow up Saturday to load and the Havana will follow her about next Wednesday and the Sparta in turn about a week from Saturday. All at the same rate. The Leonard Hanna will commence loading coal at Ashtabula for Escanaba next Monday. The Vienna and Verona will also load coal at Ashtabula for Milwaukee. The Genoa will load coal at this port for Milwaukee. The Townsend and Kelley will also load at this port for Milwaukee.

CHICAGO.

Special to the Marine Record.

The market has been very firm and vessels in good demand at 2¾c to Buffalo. The following were chartered: Propeller Alcona, Iron Chief, John B. Lyon, E. B. Hale, and schooners San Diego, Emma C. Hutchinson, Red Wing, John M. Hutchinson, Red White and Blue, James D. Sawyer and A. E. Vickery. About half the fleet here are loaded, but most of the rest are holding off for better rates with good prospects of getting it, for the indications point to a raise in grain freights.

Nicholas Schnieder, boiler maker of this city, has been rebuilding the boiler of the tug F. H. Stanwood, consisting of new fire box, new flue sheets, new main flues, new door frames, new door in back connection.

The propeller Robert Holland, Captain Myers, is receiving a new boiler, 9 feet shell, 14 feet long, from the well known shop of John Mohr & Son. She has also been getting a new crank pin and brasses being lined up and receiving a general overhauling by the Excelsior Iron Works. Engineer John Kelly is superintending the work.

The vessel owners tug Black Ball No. 2 was towed to Chicago drydock to-day for a general overhauling.

C. Larsen, boat builder, Erie street bridge, has been rebuilding the steamyacht Brett Harte—new top frames from bilge up and seven strakes of plank, new fender, wale planks, sheer stanchions, and rail.

J. W. B.

SANDUSKY.

Special to the Marine Record.

A prevailing south wind the past few days has carried away a large amount of ice and the bay is rapidly reaching a navigable condition.

The steambarge Norma fired up last week Thursday and made a short run for the purpose of testing her machinery, which had been recently put in, the fire of last winter having made it necessary to send it to the shops for repairs. Everything worked smoothly, and the following morning the Norma cleared for Marblehead to load stone for the Ohlemacher lime kilns, this city. Aside from the steamer Eagle, which runs between here and the islands eleven months in the year, the Norma is the first craft to leave port this season. She also took the lead last spring, at which time it took nearly half a day to break her way through the ice from this port to Marblehead, a distance of four miles.

The tug Annie Robertson fired up Sunday and made a short trip upon the lakes. Heavy ice was encountered outside, and a large hole was stove in her hull. She managed to reach port without further damage and was immediately placed under the care of the ship carpenters.

The steambarge Roland made a trip to Marblehead and returned with a load of stone Monday.

The steamer Bessie made a trip from the Peninsula to this port Monday with a load of lime.

The steamers Jay Cooke is being prepared for a coat of paint. A few minor repairs are also being made to her. F. K.

SARNIA.

Special to the Marine Record.

Captain Thos. Currie purchased the tug River Queen at auction sale held here on the 11th; consideration $1,000.

The schooner Pandora, Captain B. H. Cooper, is receiving new hatch combings and some general repairs to keep her up to the grain carrying class.

The schooner Cataract, Captain Joseph Glass, is getting some new deck beams, new decks, a new forecastle to be placed on deck, and a general overhaulingat a cost of about $1,000.

The schooner R. Morwood will receive new covering boards and hatch combings, some new stanchions and have her top sides calked. WILLIAMS.

BUFFALO.

A dispateh to President Thomas of the local Seamen's union announces that at a meeting of the Chicago union the following nominations were made: For Chicago: Richard Powers, president; Messrs. Deal and Kiley, vice-presidents; Morris Auer, secretary. For Detroit: Andrew Forbes, president. For Toledo: William Cannon, president.

The Detroit and Toledo branches are supported by the Chicago, Cleveland and Buffalo unions.

Captain Jerry Coleman of this city will sail the schooner Moonlight, long commanded by Captain Dennis Sullivan.

J. C. Gilchrist of Vermillion, O., one of the new owners of the steamer Cumberland, was here, and ordered some improvements made in her machinery.

Captain Jones Millen of Detroit was visiting among the local vesselmen. He says it has been decided to alter the propellers Haskell and Avery so as to better adapt them for handling ore and coal. The Frost is to remain as she is.

James Davidson has made changes in the masters of the steamer G. T. Hope and the schooner Polynesia. Captain Frank Welcome will run the Hope, and Captain Charles Brown, formerly with D. S. Austin & Co., the Polynesia. Captain A. W. Reed remains on the Australasia.

At the Lake Carrier's Association meeting Captain James Millen denounced the action of certain vessel brokers who gobble up large contracts for carrying ore at good rates, and then depress matters so as to secure vessels to do the work at lower figures. He held that vessel owners should steer clear of such agents.

It is said that the propellers Russia and Colorado will continue in the Green Bay route this season.

No changes will be made in the fleets of Hon. James Ash or Smith & Davis.

The ore contracts of the propeller Coffinberry and the schooner Newcomb have been renewed for two years, with the privilege of three.

MILWAUKEE.

Special to the Marine Record.

Dick Davis has delivered the steel boiler for the steambarge on the stocks at the Milwaukee Company's yard.

Present indications point to an early opening of navigation through the Straits. Captain Kirtland states that previous to the advent of arctic weather in January but little floating ice had accumulated in the Straits, to shove and pack as is usually the case. With the first blizzard the narrows were bridged from end to end, and this bridge has thus far remained unbroken, and will remain so until the final break-up occurs, probably toward the close of the present month. Though more firm and flint like, in Captain Kirtland's opinion the ice covering the Straits has at no time during the winter been thicker than that in the basins here. That it has not attained greater thickness must, of course, be attributed to the strong currents sweeping back and forth between Lakes Michigan and Huron. The ferry steamer Algomah has not missed a single trip thus far. A dispatch from Cheboygan announces that open water can be seen on Lake Huron. This is significant of the fact that but little ice has formed at the lower end of Lake Michigan and upper end of Lake Huron during the winter months, and assures an early breaking up soon after really warm weather set in.

Work here is progressing very well. A number of steambarges are having their machinery overhauled, preparatory to the opening of navigation.

The schooner Moonlight has been chartered to load grain for Buffalo on a through rate.

The alterations to the steamer Minnesota are about completed and a number of vesselmen, who have admired her appearance declare that it is impossible to recognize her as the same boat, a compliment to both Captain Rickettson and Donahoe, as well as Wolf & Davidson, who have made the alterations.

Captain Carter's new steambarge, weather propitious, will be shut in this week, after which every day's work will make considerable of a show toward completion.

Wolf & Davidson are also making repairs to the following vessels: The schooner Pathfinder is having her topsides thoroughly recalking, and as soon as possible she will be docked and have her bottom overhauled. Captain James Calvick, the urbane, is presiding elder of the job.

The schooner Surprise and La Petite are also being extensively repaired. The steamer George Burnham is being recalked. The schooner M. L. Collins recaulked and other repairs. The tug Kitty Smoke is getting some new plank, covering board, stanchions, bulwarks, rail, decks, new cabin, etc; she will run in the opposition line in connection with the tug John Evenson. The Kitty Smoke will be handled by Captain John Archer of Cleveland, while Captain Frank Richardson, formerly of tug Maxon, of this port, will pull bells on the Evenson, and we think they will make things extremely warm for the opposing lines this season. The steamer Whiting is being pushed rapidly and Captain McArthur breakfasts at 5:30 p. x. in the morning, reaches the ship yard at 6., and follows the bolt cutter all day long for fear that he will get a short bolt in on him. He has a very severe attack of edge bolt on the brain. The above amount of work being done by Wolf & Davidson is pushing them considerably. They have over 225 men employed and demand exceeds the supply.

The Milwaukee Shipyard Company are also doing a large amount of work. They have been making repairs to the steamers Kershaw and Ballentine and their new steambarge is about completed. She is very nice.

Captain Ed. Thorp will arrive here this week to begin fitting out the wrecking tug Leviathan.

Captain Jameson, the Evangelist, was taking a view of one of the blast furnaces last Sunday afternoon, figuring how many trips he would have to make to run it next season.

One of our prominent Detroit captains located himself at the Hotel Kent last week where he thinks that he has very good prospects of enjoying home comforts without extra charge.

Since big steambarges have become the rage, Wolf & Davidson, with their usual foresight, thinking that if anything will sell a big one certainly will, have determined to make their new one 280 or 290 feet keel. This will be the largest steambarge ever built at this port up to the present time.

CAPTAIN KIDD.

MARITIME LAW.

ALIBI—COLLISION IN THICK FOG—QUESTION AS TO IDENTITY OF COLLIDING VESSEL.

U.S. District Court, Eastern District New York.

Hogg vs. Pennsyvania Annex No. 3.

On February 6, 1884, about 6:50 in the evening, in the midst of a "dense black fog," the steamer Western Texas, which was lying moored on the north side of Pier 9, East River, bows out, was struck on her port bow by some unknown vessel and seriously damaged. At about the same time the Pennsylvania Annex boat No. 3, on her way from Brooklyn to Jersey City, collided with something on the westerly side of the river. The Annex boat was sued by the owner of the Western Texas for the damage to the steamer, and the defence set up by the former was that she was not the boat that did the damage; this was the only question at issue in the suit; the controversy over this was severe, and the testimony voluminous.

The libellant produced two witnesses who were on the schooner Jordan L. Mott, which was lying in the same slip as the Western Texas, at the time of the collision, who swore that the colliding vessel was a ferry boat, a ferry boat with an iron gate crossing the bow, a ferry boat with peculiar hoods on the upper deck, and a ferry boat that had on its side in large gilt letters NEX. Libellant also sought to fasten the collision on Annex No. 3 by arguments drawn from the course of the ferry boat, the direction of the blow, and the character of the fracture, all of which it was alleged were exactly such as would be made by the guard of this ferry boat, in the course on which she was alleged to be, and by splinters taken from the broken plate of the Western Texas, which it was asserted, corresponded in color with the red guard of the Annex.

For the claimant, on the other hand, evidence was given that what the Annex boat collided with on the night in question was a pier, probably Pier 3; that the colliding boat must have been going at a high rate of speed, while the Annex was moving very slowly by hand; that the colliding boat had different lights from the Annex; that she was loudly and profanely hailed by the mate of the Western Texas, while the Annex was hailed by no one, and that the colliding vessel struck a violent blow, accompanied by a loud crash, while the Annex lightly and almost in silence touched the pier, leaving scarcely a scratch on the iron band around her bows.

Claimant also produced the records kept of the times when the ferry boat left Brooklyn, and arrived in Jersey City, which put the departure from Brooklyn at 6:30, and the arrival in Jersey City at 6:52.

These records were challenged by libellant, who asserted that they had been altered and fabricated for the purposes of this suit. There was an admitted alteration in the record of the time of leaving. Three edges of the leaf on which was the record of the time of arrival were green and the fourth was white, as though it were taken from a book with green edges; the libellant contended that this proved that it had been fraudulently inserted in the record. In answer the claimants pointed out other alterations in figures that had no bearing on this case, and other leaves with green edges in the records of other months.

Held on the evidence, that libellant had not proved that the colliding vessel was Annex No. 3, and that the libel should be dismissed.

Benedict, J.

This action is to recover of the ferry boat Annex No. 3 the damages sustained by the steamer Western Texas by being run into on the evening of February 6, 1885, while lying alongside Pier 9 in the East river. At the time this damage was done to the Western Texas, a fog of extraordinary density was prevailing, and the only question at issue is whether the boat Annex No. 3, here proceeded against, was the boat by which the damage in question was done. Over this question the contest has been severe, and a large amount of testimony has been taken.

I have given this testimony a careful examination, aided by elaborate briefs from the advocates, and my conclusion is that the libellant has not proved that the damage in question was done by Annex No. 3.

My view respecting some of the positions taken in behalf of the libellant may be stated.

It being conceded that in this same fog Annex No. 3 made a trip from Brooklyn to Jersey City, and during the trip came in contact with something, within a short distance of the place where the Western Texas lay when struck, it is claimed to be a singular coincidence. There should be nothing unusual in two or more ferry boats even passing down the East river at nearly the same time, and nothing strange, if, in such a fog, more than one of them should bring up in the locality where the Western Texas was moored. Unless persons who were passengers on the Annex No. 3 on the trip she made, who have no interest in the controversy, have sought to mislead the Court as to what occurred on the trip, it seems impossible that such a blow as was received by the Western Texas was delivered by Annex No. 3 during that trip. Every passenger called, save one called by the libellant—as to whose veracity there is cause of doubt—testifies that the touch of Annex No. 3 upon what she struck, was altogether too light to do damage, and there is testimony given to prove as a fact, that what Annex No. 3 touched was a pier. Great reliance is placed by the libellant upon the testimony of two witnesses who were upon the schooner Jordan L. Mott, a vessel lying in the same slip with the Western Texas at the time she was damaged, and who saw the boat that did the damage. But these witnesses testify to seeing more than I think it possible for them to have seen, considering their position and the density of the fog. It is difficult to understand how there could have been any collision at all, if it were possible to see as well as these witnesses say they saw. Besides, one of them says that pieces of wood were knocked off the boat that ran into the Western Texas and fell into the water, and that he vainly endeavored to secure one of them. No pieces of wood were broken off Annex No. 3, as is plainly proved. Again, it is argued, from the strength of the tide and the testimony of those on Annex No. 3 respecting her speed, and an estimate of her weight, that she would have delivered a blow of 8,000 tons weight. If this be so, it seems to my mind impossible that Annex No. 3 could have delivered a blow upon the rigid iron side of the Western Texas, lying alongside a pier, not only without injury to herself, but also leaving her bow free from any marks indicating that she had been in collision. I gain no light upon the question at issue from the testimony respecting the direction of the blow received by the Western Texas, nor from the testimony showing want of anxiety on the part of those on Annex No. 3 to learn what object she came in contact with, nor from the shreds picked from the broken plate of the Western Texas. The testimony respecting the hail from the Western Texas and the lights seen on the boat that did the damage, makes against the libellant, as it seems to me. The testimony raises a doubt in my mind whether the boat that struck the Western Texas had the iron folding barrier which is upon the Annex No. 3, although there is no doubt that there was some sort of a fence upon her. There remains to allude to what should, I think, be considered decisive of the case—namely, the record of the ferry boat's time of departure from Brooklyn and her arrival at Jersey City on the trip, when it is claimed by the libellant that she ran into the Western Texas. Such records were kept at both places in the regular course of the business of the ferry. They are produced by the claimant to show, as they do show, that Annex No. 3 was not in the neighborhood of the Western Texas at the time she received the damage in question. These records, as they stand, are conclusive against the libellant. But these records are challenged by the libellant. The one showing the time of departure, it is insisted, has been altered in the figures, the other, showing the time of arrival, it is insisted, has been fabricated for the purposes of this suit. The charge that the figures showing the time of the boat's departure from Brooklyn have been tampered with, has for its basis an apparent alteration in a figure in the entry of the time of the departure. But alterations in other figures are apparent elsewhere in the record, and a change of a figure in an entry of this character may easily occur, and is not by itself sufficient to prove a fraudulent intent to falsify the record. The effort to conceal the change in the figure, which is greatly relied upon as being proved by the paper itself, is not apparent to me. I see no material difference between this entry and other entries in the same record, where there is no reason to doubt that the figure was changed at the time of making the entry, to make the entry correspond with the facts. The charge that the record of the boat's arrival in Jersey City on each trip is a fabrication has for its basis the fact that the edges of that one of the sheets produced which contains the record of the day in question show a green stain, such as would appear on a sheet that had been once bound in a book, and there are indications that the sheet in question had been trimmed, whereas the records at Jersey City were kept on loose sheets, and not bound in a book, while the records kept at Brooklyn only were bound in a book.

Here the difficulty is, that other sheets of the records kept at Jersey City, having no bearing whatever on this controversy, and which, as produced, could not have been substituted for the purpose of affecting the present suit, are similar to the sheets in dispute. In the March records there are three such sheets. Undoubtedly the peculiarity in the disputed sheet entitled the libellant to require positive proof of its genuineness and accuracy. That proof has been furnished by the testimony of those who made the entries and produced the sheets, and evidence has also been furnished from the office where the blank sheets were printed, tending to show how sheets like this might be produced without ever having been bound in a book, although, of course, there is no evidence from the printer in regard to these particular sheets. Notwithstanding, therefore, the bold assertion that these sheets convict the claimants of endeavoring to escape liability in this action by "fraud, perjury and forgery," I am of the contrary opinion. To my mind, these sheets alone prove that the libellant has mistaken the vessel to proceed against, and compel a decision of this case adverse to the libellant.

February 27, 1886.

REPORT OF PRESIDENT S. D. CALDWELL.

To the Members of the Lake Carriers' Association.

GENTLEMEN: I have the honor to submit, on behalf of your board of managers, my first report as president of this association.

The Lake Carriers' Association was organized in May, 1885, its purpose being, as explained in its constitution, "to consider and take action upon all general questions relating to the navigation and carrying business of the great lakes, and the waters tributary thereto, with the intent to improve the character of the service rendered to the public, to protect the common interest of lake carriers, and promote their general welfare." Organizations of this sort have existed heretofore in the trans-Atlantic trade and the ocean coastwise trade, and have been very effective in systematizing and perfecting the ocean carrying business, and protecting it from adverse legislation. Nothing of quite this nature has existed on the lakes, however. There have been combinations of lake carrying interests for particular purposes, to prevent competition to control rates, etc., but nothing created, like this association, to deal only with general questions, affecting the entire lake carrying marine.

The need of some association of the kind will be generally admitted. The lake carriers represent important interests upon which the commercial and industral progress of the country is largely dependent; but, owing to lack of organization, their position and influence have not been properly recognized. It is the purpose of the Lake Carriers' Association to concentrate teis influence, so that it may be used effectively in encouraging and directing proper legislation and appropriations in the interest of lake navigation by the National Government; and in other directions that may be for the general good of the lake carrying service. In 1884 (the figures for 1885 are not yet accessible) 46,939 vessels, representing 19,645,271 tons, passed down the Detroit river. This is five times the combined tonnage of the Mississippi and Ohio rivers for the same period. Yet the appropriations from Congress in the last ten years (1876-1885,) covering all the improvements on the Great Lakes during that time, including harbors, locks, and canals, have been $9,000,000, while the appropriations for the Mississippi alone, for this same ten years, have been $25,000,000.

There are constantly arising complicated questions regarding marine laws, and the rights of vessel owners, which it is difficult for individuals to adjust satisfactorily without great expense and trouble, but which this association, aided by the counsel and combined experience of its members, can handle successfully, economically and rapidly. A brief record of the work of the association during the past year will show some of the more important of these questions taken up, questions which it would be difficult for any vessel interest to handle singly, but on which the Lake Carriers' Association, as a body, can exert a powerful influence.

CANADIAN WRECKING LAWS.

In October, 1885, this association, believing the present interpretation of the Canadian wrecking laws to be unjust to American vessel interests, obtained from competent Canadian counsel an abstract of all the Canadian laws bearing on the subject. A set of questions was then framed, and answers to them obtained from three eminent Canadian advocates. The answers have been printed in pamphlet shape and distributed to the members. They show conclusively that an American vessel may tow another vessel, wrecked, stranded, or in distress in Canadian waters back into the waters of the United States, and that assistance may also be rendered by lightering, under certain restrictions fully explained in the pamphlet.

A communication on this subject was addressed December 15, 1885, to President Cleveland, calling his attention to the act of Congress passed in June, 1878, which authorized him to extend free wrecking privileges to Canada at any time that she might grant the same to us; and respectfully requesting him to renew negotiations with that government in the matter. A reply was received saying that the matter would be brought to the attention of the Secretary of State. We have since then been in active correspondence with Secretary Bayard, and he informs us, under date March 5, that he has brought the question, urgently, to the attention of the British Minister at Washington, with a view to reaching an understanding with her Britannic Majesty's Government for the mutual benefit of the important interests concerned.

If no change has been made in the laws by the time navigation opens, the association contemplates making a test case, under the Canadian opinions obtained, and pushing it to an issue in the Canadian courts.

SAULT CANAL RESOLUTIONS.

In August, 1885, the board of managers passed a resolution setting forth the importance of the immediate construction of a new and larger lock at Sault Ste. Marie, and the improvement, now in progress, of the Hay Lake channel, and urging liberal appropriations from Congress. These resolutions were sent to the Secretary of War, and to the Governors, and Senators and Representatives in Congress of New York, Pennsylvania, Ohio, Michigan, Illinois, Wisconsin and Minnesota.

As rehearsed in the resolutions, the Hay Lake channel will render the entire St. Mary's river navigable by night, and will shorten the distance one-fifth, while allowing the passage of vessels of heavier draught.

The new lock should be begun at once. If the commerce from Lake Superior continues to increase in the present ratio, it will in four years exceed the capacity of the present locks, working night and day. It is an interesting fact that the average daily tonnage passing through the Sault canal during the navigation season of 1884, the latest year of which we now have the records, exceeded the daily tonnage through the great Suez canal in the proportion of 8 to 7. Present indications are that Congress will grant the appropriations desired.

ARTICLE XXX, TREATY OF WASHINGTON.

Under article XXX, of the Treaty of Washington, Canadian vessels were allowed to carry United States products from one United States port to another, provided only that a portion of the through transportation was via Canada by land. That is, Canadian lines could carry American grain, flour or other freight from Duluth or Chicago to Boston or New York, the lake transportation being by Canadian bottoms but a part of the route being by rail through Canada via Sarnia or Collingwood. This article, by proclamation of President Arthur, dated January 31, 1885, was made to terminate July 1, 1885. Your association directed the attention of the present administration to this fact, and a customs circular to that effect was issued by Secretary Manning, July 2. Active measures were at once begun in the interest of the Canadian lines to have the provisions of the article renewed. July 10, 1885, this association addressed President Cleveland, by telegraph and by mail, entering a formal protest on behalf of the lake carrying trade against any extension of the treaty. Later in the month a representative of the association visited Washington to give further expression to its views.

This traffic by Canadian lines from Chicago came at once to an end; but, by an erroneous interpretation of the laws, the trade was continued from Duluth some months longer. Here the Canadian lines entered the freight, not as destined for American points, but as for export to Canada. They would then re-enter it at, say Sarnia, as exported goods returned to this country, and consequently free of duty (by the re-import act and Article 373 of the Customs Regulations.)

The Lake Carriers' Association entered a vigorous protest against this method of procedure, which was referred by Secretary Manning to the attorney-general for his opinion. An able and interesting paper on the subject was prepared for the use of the board by Mr. J. W. Thomson, of Port Huron, an expert on the question. On October 3 the attorney-general rendered his opinion, in which he held that the issue of the export certificates was illegal, there being no *bona fide* exportation. This opinion Secretary Manning promulgated October 16, and since then the traffic has been confined to American bottoms, which are amply adequate to care for it. A telegram, followed by a letter, was sent by this association to Secretary Manning October 22, formally thanking him for his ruling, and expressing the general satisfaction it had given to lake carriers.

We understand that a memorial has recently been submitted to Congress, asking that this commerce be again thrown open

to Canadian vessels. The matter will be carefully watched.

UNIFORM BILL OF LADING.

August 27, 1885, the board of managers took up the subject of the proposed uniform bills of lading of the New York Produce Exchange, and the Chicago Board of Trade. September 17, a committee, known as the "Special Committee on Uniform Bills of Lading" was appointed, consisting of Frank J. Firth, Washington Bullard, Eber Ward, Joseph Austrian and W. M. Egan, to confer with the Chicago Board of Trade with reference to the adoption of a uniform form of lake, and lake-and-rail bill of lading. This committee met a committee of the Chicago Board of Trade in Chicago, October 7th and 8th. The report of the committee was submitted to your board at its meeting February 13th, was accepted, and the committee continued, the conclusions of your board being expressed in a series of resolutions, a certified copy of which was transmitted to the Chicago Board of Trade. It is confidently hoped that a mutually satisfactory form of bills of lading will be agreed upon before navigations opens.

This association has been represented in the "National Committee on Uniform Bills of Lading" since June, 1885. That committee is seeking, by the united action of carriers and shippers, to amicably adjust all differences as to bill of lading conditions.

BUFFALO GRAIN SHOVELLING CHARGES.

July 23, 1885, the board took up the question of the excessive charges at Buffalo for shovelling grain in vessels. A committee, consisting of Messrs. David Donaldson, W. P. Henry, Frank Perew and James Ash, was appointed to wait upon the Western Elevating Co., and see what could be done toward securing a reduction of the charges. July 28th, a letter was addressed to the Executive Committee of the Western Elevating Co., requesting a reduction of one dollar per thousand in the charge for steam shovelling. An answer was received, offering a rebate of fifty cents per thousand during August, provided this should be accepted by the association as finally satisfactory. This offer was declined, and the original request was renewed. No result was reached, and the matter drifted along through the fall. In January the question was again revived, and a new committee was appointed, consisting of E. T. Evans, James Davidson and David Donaldson. No satisfactory response being received from the Western Elevating Co., a resolution was passed by the board, February 20th, instructing the Secretary to have drawn up, by a competent lawyer, a bill for introduction at Albany, making the steam shovel a constituent part of the machinery of grain elevators using them in the state of New York, and declaring that no extra charge be allowed for the use of such shovel, but that such services be included in the regular charge for elevation. This bill has been prepared, and will be taken up at the first meeting of the new board.

I may state that negotations are now in progress by which we have good reason to expect that before navigation opens a satisfactory reduction will have been secured.

LEGISLATION.

A number of measures before Congress, of importance to vessel interests, have been discussed during the year by the board, and in a few cases resolutions approving or condemning the measures have been passed, and sent to the senators and representatives from the districts represented by the association, and to other persons interested.

NATIONAL BOARD OF STEAM NAVIGATION.

In January, 1886, overtures were made by the National Board of Steam Navigation to unite this association with theirs. Their association has a large and powerful organization, extending over the entire country, and had at one time an extensive lake representation. It has rendered valuable services to the marine interests of the country, notably by procuring the abolition of the hospital dues and certain other fees. The opinion of our board was, however, that our association could work independently to better advantage, though correspondence and harmony of action between the two associations would always be desirable.

GRAIN SHORTAGES.

The recent interesting decision by Judge Brown in the United States district court at Detroit, in the Lizzie A. Law, case, has not yet been brought before the board. It is perhaps a proper subject for discussion at this meeting. The Lizzie A. Law in November, 1884, took from Port Huron a cargo of wheat for Buffalo billed at 46,067 bushels. On arrival at Buffalo there was an apparent shortage of some 496 bushels. In settling at Buffalo, the value of the 496 bushels was deducted from the freight; and this suit was brought to recover this amount, Judge Brown's decision is that a vessel discharges her whole duty to her cargo by delivering in good order all that she has received.

It has been suggested that this association might render a valuable service to lake carriers by undertaking the investigation of cases of excessive lake shortages reported by its members to the secretary of the association.

LIGHT AND FOG WHISTLE ON SQUAW ISLAND.

February 22, 1886, the secretary, by direction of the board, addressed a letter to Captain C. E. L. B. Davis, Engineer Lighthouse Board, Detroit, expressing the hearty approval by the board of the proposed construction of a lighthouse and fog whistle on Squaw Island (one of the Beaver group) and the hope that they might be erected.

OTHER MATTERS.

Other matters, in which the Lake Carrier's Association has taken no action as a body have yet come up at its meetings, and valuable individual action has been taken. At a meeting of the board February 13, Captain Perew presented to the members present the case of one of his propellers which, abont four years ago, coming into Buffalo on a dark and stormy night, ran into and damaged a canal boat lying in the river alongside a dock, with two boats inside her, and with no light exhibited. The canal boat libelled the steamer, and though a city ordinance provides that boats shall lie only two abreast, and that between sunset and sunrise every boat shall have out a proper light, a verdict was secured in the state court against Captain Perew. The case was appealed to the general court, which decided the verdict was against the evidence, and sent the case back for a new trial. A jury in the lower court again decided against the propeller. Captain Perew felt that he could not afford to appeal it a second time. The point involved being an important one, an arrangement was at once entered into by those present by which four of the members each agreed to pay one-fifth of the expense of a fresh appeal.

At the meetings of the association there has also been more or less discussion as to the general improvement of the lake service, and particularly as regards the desira bility of captains and mates having some practical knowledge of navigation. Out of these conversations has indirectly come a school, at Buffalo and Erie, in which some of the larger lines are furnishing for their mates and masters such instruction in navigation, chart practice, etc., as is applicable to the service of the great lakes. Regular certificates are furnished by the school, and the lines forming it have under consideration the advisibility of employing in 1887 no men as masters who have not satisfactorily passed its examinations.

These are some of the subjects which your board of managers has taken up during the year. They will be presented at this meeting, in order, for discussion and further explanation. Each member is invited to submit to the incoming board at any time, through the secretary, any matters which he may think proper for the association to consider and act upon.

This association has been in existence not quite a year. It now represents over one-fifth of the entire registered vessel tonnage on the great lakes, steam, sail, and canal. But this is not enough. To accomplish its purposes satisfactorily, we should have the largest possible membership. We should like to see, and ought to see, every vessel navigating the great lakes represented in our organization. The dues are so small as to be merely nominal, being one dollar a year, with a further sum of ten cents for each one hundred tons of registered vessel tonnage. Members are earnestly urged to use their best efforts at their respective ports to increase our representation. Forms of application for membership, and all desired information with reference to the association, can be procured on application to the secretary.

S. D. CALDWELL, President.

Buffalo, March 10, 1886.

The following taken from the Buffalo Courier covers the principal features of the discussion and suggestions urged before the association.

The address was received and some discussion had on the points presented in it. In illustration of the operation of the Canadian wrecking laws E. T. Evans rehersed the case of the propeller Wissahicken, grounding in Detroit river, and Thomas Maytham that of the steamer Oregon which got fast on the Canadian side of Niagara river while coming up from Tonawanda. To show the unfairness of those laws, Captain Millen stated that if an American vessel grounded at the Limekiln crossing, a Canadian channel which is being improved at the sole expense of the United States, her own consort would not dare to release her. It was decided to request Captain Maythan to prepare for the secretary a history of the Oregon case, so that it might be brought before the Canadian courts for the purpose of determining the proper construction of the wrecking regulations.

Regarding the improvements at the Sault and the abrogation of the provisions of the treaty of Washington, allowing Canadian vessels to carry United States products from an American port to a Canadian port and thence to another American port, all had been done that could be at present. Efforts were being made to revive that portion of the treaty, but they would be closely watched.

Mr. Firth, one of the committee on uniform bills of lading, said that the main object sought was freedom from liability of the vessel on account of her officers. He maintained that in these days, with staunch hulls and reliable machinery, the risk of disaster is so small that if excepted from the crew's negligence the insurance companies would have hardly any responsibility to shoulder. There was a good prospect that a bill as agreed between the Chicago board of trade and the association would be generally adopted on the opening of the season.

The next matter taken up was the grain shoveling charges at Buffalo. Captain Perew vigorously stated the grievance of vessel owners. Mr. Evans, who had been on the committee to interview the elevator men on this matter, said that he felt convinced that a mistake had been made by the association in its proposed effort to secure legislation to abolish the charge made for the use of the steam shovel. He thought there was little show for the passage of a bill even indirectly connected with labor interests. He suggested that the board put a stop to the steps taken in that direction, and felt that the reform sought could be brought about in a better way. David Donaldson said that a number of the more prominent elevator owners had confessed that the shoveling charges were too high, but he insisted that they would make no reduction unless legally compelled to do so. At the suggestion of Mr. Firth the bill prepared at the request of the committee was read. That gentleman then remarked that the elevator men had in view the same object as the vesselmen—to make a profit on their investments. The interests that had acknowledged the charges too great might be trusted to bring others to the same view. He moved that the incoming board of managers order legislative action to be suspended and that efforts be made to amicably secure the desired reduction before the opening of navigation. The resolution was adopted. It may here be stated that there are fair indications that the price of shoveling will be fixed ere long at three dollars per thousand bushels.

James Carey Evans, treasurer, read his report for the year, showing receipts of $325.42 and a balance on hand of $10.82.

Mr. Caldwell then called Mr. Firth to the chair. A motion was made to appoint a committee to select managers for the ensuing year which resulted as reported in the MARINE RECORD last week.

A vote of thanks was heartily tendered to Secretary Almy for his conscientious and intelligent services during the past year.

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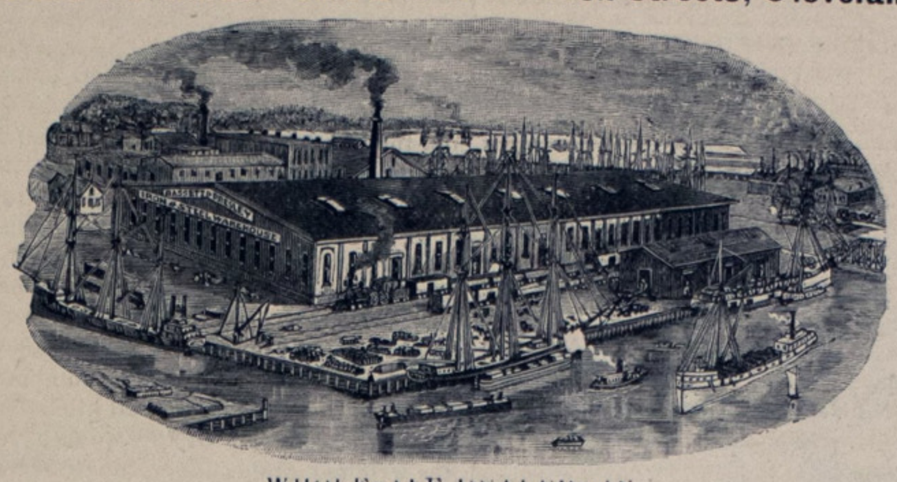

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Commencing Sunday, Nov. 29 1885, at 12 o'clock noon the time given in the figures below is the new standard (Ninetieth meridian) time, which is thirty-three minutes slower than Cleveland time proper.

Eastward.	Arrive	Depart.
No 4, Fast Limited Express	*2 55 A M	*3 05 A M
No 8, N Y, B & A Express	*8 25 A M	*8 50 A M
No 26, Elyria Accommodation	†7 45 A M	.....
No 24, Buffalo Ac'm via Sandusky	†10 30 A M	†10 50 A M
No 24, Toledo Accom via Norwalk	†10 30 A M	†10 50 A M
No 12, N Y & B Fast Express	*2 10 P M	*2 45 P M
No. 14, Special New York Ex	.....	3 00 P M
No 2, Night Ex via Norwalk	9 40 P M	†10 00 P M
No 22, Night Ex via Sandusky	†9 40 P M	.....
No 26, Conneaut Accommodation	†4 25 P M	.....

Westward.	Arrive.	Depart.
No 1, Fast Limited Express	*12 15 A M	*12 25 A M
No 23, Mich Express via Sandusky	*2 15 A M	
No 3, Chicago Express via "	§6 00 A M	6 30 A M
No 25, Mich Accom Norwalk	.....	†6 30 A M
No 21, Toledo Ex via Norwalk	†12 50 P M	†3 30 P M
No 5, St Louis Ex via Sandusky	*10 50 A M	*11 00 A M
No 9, Chi Pac Ex via Norwalk	6 15 P M	§6 40 P M
No 31, Elyria ac to Elyria only	.....	†4 30 P M
No 27, Conneaut Accommodation	†8 10 A M	.....

Sunday train for Nottingham—Depart 8:15 a. m. and 1:45 p. m.; returning, leave Nottingham at 8:50 a. m. and 3:45 p. m.

Reference marks—* Daily, † daily, except Sunday, § daily, except Monday.

A local Cleveland and New York sleeper daily on No. 12, leaving Cleveland at 2.45 p. m.; arrive Grand Central depot, New York, 10 30 a. m

For full information as to trains and connections apply at the Union ticket office, corner Bank and Superior streets, under Mercantile Bank.

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Following is the time in effect June 28, 1885, and until further notice:

EASTWARD.	Arrive.	Depart.
Buffalo Passenger	*10 40 A M	*10 45 A M
Chicago Passenger	*9 02 P M	.....
Local Freight	*11 45 A M	*12 15 P M
WESTWARD.	Arrive.	Depart.
Chicago Passenger	.....	*6 45 A M
Fostoria Passenger	*4 46 P M	*4 51 P M
Local Freight	*12 20 P M	*12 50 P M

ROCKY RIVER ACCOMMODATION.
Depart—*7:45 a. m., *1:35 p. m.
EUCLID ACCOMMODATION.
Depart—*6 24 a. m., *9:10 a. m,. *5:05 p. m.
*Daily except Sunday.
Through tickets to all points are on sale at principal offices of the company at LOWEST RATES for any class of tickets desired. Baggage checked to destination
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Marine Record.

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A. A. POMEROY, EDITOR AND PROP'R.

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DULUTH, MINN.—C. F. Johnson, 117 West Superior Street.

ESCANABA, MICH.—Wm. Godley.

Subscribers and others are respectfully invited to use the columns of the MARINE RECORD for the discussion of pertinent topics.

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Entered at the Post Office at Cleveland as second-class mail matter.

CLEVELAND, OHIO, THURSDAY, MARCH 18.

BOILERS AND MACHINERY.

We have received from the committee on boilers and machinery, of the National Engineers' Beneficial Association, a copy of their address to the members, urging upon them the advisability of compiling and rendering to the committee all information in connection with their business of marine engineers, the breaking of shafts, wheels, boiler explosions, loss of life, and the merit of new devices, urged by supervising inspectors upon the merchant marine of the country. Following is the address:

ST. LOUIS, MO., February 25.

To the Order in Unity and Friendship, Greeting:

It was the desire of the national association, when it created a standing committee on boilers and machinery, to benefit the order and its members thereby. It is therefore the earnest desire of this committee, acting by and with the approval of the national president, to gather such information as will prove useful to the members of this order, whose aim is the better educating of the marine engineer. Some associations have appointed a sub-committee on boilers and machinery, who will, through their association, render a report to this committee, and it is earnestly desired that each association do the same. This committee desires all the information possible regarding boiler explosions, therefore, when an explosion occurs in your section, whether on land or water, gather all the facts possible, that is, "what sort of boiler it was, age of the boiler, whether made of iron or steel, flued or tubular, externally or internally heated, where located, also the extent of the damage done, lives lost, etc." When full explanations are given in the public press, cut the article out and send it, name of paper and date of publication. We invite every member to give us any information he can upon this and other matters. Any serious or complicated "break down," if reported briefly and explicitly, will be of benefit to this committee, and writing the facts will give you greater ease in composition, and therefore benefit you. This committee is particularly desirous of gathering information in regard to the breaking of shafts on steam vessels, with full particulars as to size, material used, speed of engine at time of breakage, kind of wheel, and service in which the vessel was used. Many expensive devices are yearly being introduced to the board of supervising inspectors, by wealthy manufacturers, with a view of getting them adopted for use upon the vessels of our merchant navy, therefore, it is earnestly desired that all members report their experience in the operating of any new patent device for boiler or engine, giving fully and concisely every advantage or disadvantage resulting from its use.

This committee desires to make a full and useful report, and they will therefore close the year 1886 on December 1st, and your earnest co-operation is solicited. Address all reports or letters to J. W. Shea, Chairman, 1403 Montgomery Street, St. Louis, Mo.

J. W. SHEA, St. Louis, Chairman.
WM. E. RUSSELL, Pittsburgh.
WM. E. ELLIOTT, Milwukee.
T. J. QUIGLEY, San Francisco.
JAMES E. CARTER, Philadelphia.
Committee on Boilers and Machinery.
HENRY G. PAYNE, National President.

MUCH opposition has developed against Senator Sewell's bill to authorize the International Navigation Company to obtain American registers for foreign built ships. The bill is on the calendar of the Senate, having been favorably reported by Senator Cameron, chairman of the committee on commerce, but is opposed by Senator Randall by protest of the vessel owners' association of Philadelphia, who declare that all American ships should be built in the United States, by American shipbuilders. The bill is also strongly opposed by the iron manufacturers, and as it is of the character of special legislation, without any of the merits which commend for passage bills of this nature, it will never be enacted.

THE ELEVATORS.

The report of the weighmaster, submitted at the annual meeting of the Buffalo Merchants' Exchange on the 13th of January, gives details of the business of the several elevators in the lake region which can not fail in interest to all lake carriers. In comparative tables, showing total receipts of grain and the number of bushels over and short from each elevator, the weighmaster makes quite a good showing by averaging all kinds of grain short per 1,000 bushels. The receipts of grain and seed by lake were 27,130,400 bushels of wheat, 20,959,480 bushels of corn, 767,580 bushels of oats, 309,370 bushels of rye, 577,230 bushels barley, 2,858,260 bushels of flaxseed, making a total of 56,602,320 bushels of grain of all kinds during the season of 1885. Of this quantity there was weighed grain, under the supervision of the Merchants' exchange weighmaster, 36,095,671 bushels, with a net shortage of 6,451 bushels. This shortage is made to appear small by averaging it down to eleven pounds per 1,000 bushels on wheat.

The following tables show the quantity of each kind of grain referred to and from which elevator it was shipped, the shortage and the over run:

	Bushels.	Short.	Over.
Wheat	17,036,800	12,046	5780
Corn	15,972,000	5,210	6178
Oats	554,600	612	28
Rye	234,600	157	21
Barley	160,200	108	75
Flax Seed as settled	2,140,500	505	105
Note—Flax Seed per manifest	2,141,054	2,293	1 1,363

From	Bushels.	Short.	Over.
Chicago	21,561,400	7169	7515
Milwaukee	2,025,300	1012	424
Detroit	2,032,500	1816	228
Toledo	1,762,000	1307	544
Duluth	7,828,900	6923	3050
Fort Howard	266,000	135	30
Port Huron	488 300	203	327
Sandusky	131,100	68	64
BUFFALO ELEVATORS.			
N Y., L.E & Western	5,648,000	2717	1392
Niagara A	1 809,600	578	350
Niagara B	3,274 000	2133	1561
Tifft	2.294 800	1919	1216
City	7 210,800	4010	1375
C. J. Wells	1 349,800	1183	290
Wilkeson	354 900	526	357
Wheeler	1,040,500	425	160
Marine	356 600	270	85
Kellogg & McDougall	248,600	63	61
Sturges	353 300	17	206
Lyon	35 700	3	----
Richmond	1,703,300	830	355
Connecting Terminal	6,091.300	2500	2628
Brown	152,100	27	86
Watson	64.700	8	----
Evans	1,196 500	629	694
Swiftsure	85,500	113	----
Bennett	2,674,000	661	1276
Exchange	68 500	10	43
National Mills	58,800	61	----
Williams' Tubs	24,100	----	47
DULUTH ELEVATORS. (Full Cargoes.)			
A	271,800	282	----
B	1,352.700	1151	337
D	1 305.900	1136	311
E	1,054,600	1223	600
Duluth & Western	301,600	341	57
DULUTH ELEVATORS. (Part Cargoes.)			
A	1 070,700	768	1194
B	1,038,600	976	298
D	2,515,600	1678	1467
E	2,267,400	1909	1460
Duluth & Western	1,140,500	991	935
DETROIT ELEVATORS. (Full Cargoes.)			
Michigan Central A	79.300	120	----
" " B	477,500	214	93
Detroit & Milwaukee	135,100	95	----
Union	299,300	326	29
DETROIT ELEVATORS. (Part Cargoes.)			
Michigan Central A	280,400	223	36
" " B	703,600	859	36
Detroit & Milwaukee	747,600	831	103
Union	474.700	369	39
TOLEDO ELEVATORS. (Full Cargoes.)			
Bennet	80,000	94	----
Kings	88,000	26	5
Central	16,000	8	----
Dayton & Michigan A	16,000	----	7
" " B	208,000	216	8
Michigan Southern A	64,000	11	7
" " B	112,000	125	----
Wabash 4	96,000	26	20
" 5	647,200	381	373
TOLEDO ELEVATORS. (Part Cargoes.)			
Bennett	25,100	121	83
Kings	97,400	72	6
Central	72,800	47	12
Dayton & Michigan A	88,400	67	17
" " B	217,100	196	20
Michigan Southern A	96,100	85	----
" " B	136,700	68	22
Wabash 5	27,700	185	14
Union	65,300	168	83
MILWAUKEE ELEVATORS. (Full Cargoes.)			
A	66,600	78	40
B	130,200	61	20
C	65,000	----	82
E	99,500	60	11
Smith's A	68,500	----	49
" B	63,200	12	33
Northwestern	99,000	----	12
Kraus	50,900	44	65
MILWAUKEE ELEVATORS. (Part Cargoes.)			
A	434,500	228	25
B	645,600	548	57
C	446,200	370	65
E	458,700	241	49
Smith's A	491,800	100	55
" B	608,800	229	68
Northwestern	273,000	76	20
CHICAGO ELEVATORS. (Full Cargoes.)			
Central B	654 600	198	71
Galena	53 000	----	----
Air Line	114,100	109	3
Pacific	130 900	153	----
St Paul	475 800	81	285
Commercial	82.700	166	29
Washington	246,700	114	113
Empire	176,000	7	76
Illinois River	16,900	---	10
City	55 300	----	58
Iowa	1,147,000	100	855
Rock Island A	1.049.200	489	140
" B	51 100	73	----
Armour, Dole & Co A	3 413.400	720	1,807
" " " B	94 000	8	45
" " " C	68,300	----	43
" " " D	263 800	101	45
Union	60,000	59	----
Indiana	347.600	29	136
Neeley's	79,400	10	56
National	93.000	----	102
St Louis	524.80	157	70
Wabash	41 500	----	78
Calumet	317 000	----	----
CHICAGO ELEVATORS. (Part Cargoes.)			
Central A	72 000	----	113
" B	3.222.000	1218	561
Galena	639 700	177	----
Pacific	143.200	----	----
North Western	932 700	863	15
St. Paul	1 954 300	1107	300
Ful on	321,800	103	60
Washington	89,000	24	----
Empire	568,100	46	19
Illinois River	52,800	----	37
City	800,600	200	279
Iowa	5,479.600	2540	1,273
Rock Island A	3.756,700	1352	1,042
" " B	527,000	130	8
Armour, Dole & Co A	6,209,800	2405	2,544
" " " B	191,802	396	77
" " " C	260 000	92	91
" " " D	753,000	625	86
Union	48 400	7	----
Indiana	2.529 300	1013	427
Neeley's	314.300	505	25
National	98.600	70	----
St. Louis	2 169 800	1078	595
Wabash	38,000	----	20

It will be seen by following the details of the tables that with the exception of a few isolated cases the elevators have succeeded in keeping up their reputation of not letting the vessels get as much grain in or as much out as the bills of lading called for, a condition of affairs which told heavily on the low grain freights for which they worked last season, and added materially to the wealth of the elevators. With these evils in view it is to be desired that the negotiations now going on between the committee of the Lake Carriers' Association and the elevator people, will find some equitable and just settlement regarding shoveling charges, and that some form of bill of lading may be agreed upon before navigation opens which will make it impossible for vessels to be mulcted of a good share of their freight money by being compelled to pay for shortage.

WE have received the illustrated catalogue and price list of the Penfield Block Company, Lockport, N. Y., for 1886. The book is devoted to the articles manufactured by that company, comprising Anchor brand wood and wrought iron tackle blocks, so universally in use on both lake and ocean, snatch blocks, special cargo hoisting blocks (not heretofore listed by the company), trucks, mallets and faucets, cant hooks, and giant car pushers, the prices of each article in detail, and other interesting matter pertaining thereto. This book, which is furnished on application, should be in the hands of all ship builders, chandlers, and vessel owners, and, in connection with the catalogue of the Penfield Company for 1884, the latter having their cipher telegraph key, should be preserved for ready use.

J. W. BARLOW, Lt. Col. of Engineers U. S. A., Milwaukee, transferred, on the 10th inst., the works of river and harbor improvement in his charge, to Captain Wm. L. Marshall, U. S. Engineer, whose headquarters will be in Milwaukee, and to whom all communications relating to such work should be addressed. Captain Marshall's jurisdiction extends over Lake Superior, east of Superior City, and Green Bay and the west shore of Lake Michigan, north of Milwaukee.

CAPTAIN BARTLETT, of the Hydrographic Office, U. S. N., Washington, believes that at least half the vessels lost last season on the great lakes might have been saved by a judicious use of oil on the troubled waters. The oil bag must eventually come into general use on the lakes as the "duff" bag has at sea.

ADVERTISEMENT.

HARBOR OF REFUGE, LAKE HURON.

PROPOSALS FOR BUILDING A STEAM LAUNCH United States Engineer Office, 34 Congress street, west, Detroit, Michigan, March 1, 1886. Sealed proposals, in triplicate, will be received at this office until 2 o'clock p. m., on March 31, 1886, at which time and place they will be opened in presence of bidders, for building one steam launch. The government reserves the right to reject any or all proposals.

Blank proposals and full information as to the manner of bidding, conditions to be observed by bidders, and terms of contract and payment, will be furnished on application to this office.

O. M. POE, Lieut-Col. of Engineers,
Byt. Brig. Gen. U. S. A.

OBITUARY.

PHILO CHAMBERLAIN.

During the navigation of the lakes few men have been more largely interested in floating property or more closely identified with the commercial interests of Cleveland, than Mr. Philo Chamberlain, whose death occurred at Glen Haven, March 10. For more than thirty years Mr. Chamberlain has been active in commercial pursuits, and being possessed of untiring energy, reverses had no depressing effect upon him, and with great executive ability he always maintained the lead in business projects. Mr. Chamberlain was born January 31, 1811, in Sheldon, Vt. He commenced his career as a school teacher in Montreal, Canada. Between the years 1830 and 1840 he embarked in business in Akron, O., as a forwarding and commission merchant, and there, through his industry, prudence and sagacity he met with signal success. He then removed to Cleveland in the year 1848, and organized the old Northern Transportation Company, during the existence of which the following named propellers were constructed for the line and came under the management of Mr. Chamberlain: Vermont, J. W. Brooks, Lady of the Lakes, Bay State, Prairie State, Ogdensburg, Wisconsin, Maine, Young America, Brooklyn, City of Boston, City of Toledo, Akron, Cleveland (1st), Cleveland (2d), St. Albans, Granite State, Buckeye, Jefferson, Northern Michigan (afterward named Ontario), Garden City, Empire, City of Concord, Lowell, Oswegatchie, Nashua, City of New York, Lawrence, Michigan, and Milwaukee. These fine, staunch boats were built with special reference to the passage of the Welland canal and were necessarily of limited tonnage, ranging between 325 and 400 tons. When the Northern Transportation Company went out of existence Mr. Chamberlain retired from active business and removed to Glen Haven, Mich., where he had a large tract of timber land, several thousand acres.

Mr. Chamberlain was firm in his convictions, and when satisfied that he was right cared not for question or criticism. He was unwavering in his friendship, and to employes just and generous, a devoted husband and indulgent father. He leaves seven children, the fruit of his second marriage. Those friends who knew him best will cherish his memory to the end, and will dwell with pleasure on his course in the battle of life.

The following was unanimously adopted by the members of the board of trade at their meeting on Monday:

WHEREAS, The members of this board of trade heard with regret of the death of another of its charter members, Mr. Philo Chamberlain, which forcibly impresses upon us the fact that but few of the originators of our organization now remain. By referring to the records we find that Mr. Chamberlain was one of the most active members of this board while a resident of this city. He drafted and was enthusiastic in securing its charter, and afterward served two terms as president. He was an active, energetic business man, and has been closely identified with many of the public improvements of the cities of Akron and Cleveland, and we join our sympathies with the afflicted friends and family in this their sore bereavement.

Resolved, That these expressions of regret and sympathy be spread upon our records, and a copy of the same sent to the family of the deceased.

CAPTAIN JONATHAN LARNED,

For thirty years a highly esteemed resident of Sandusky, died at his home, No. 218 Fulton street, on the afternoon of March 11. Deceased was in his 69th year at the time of his death, which was the result of chronic diabetes, from which he had suffered untold agony over a year. He had followed the lakes almost uninterruptedly from his early youth, and for a quarter of a century has been well known all along the chain of lakes. One of the first vessels that he sailed was the schooner Pride, which made Sandusky her headquarters. He subsequently bought out the new schooner Hanna, which was builtt at Sandusky, and sailed her a number of seasons. The last craft he commanded was the scow Dawn, of which he was owner. Being always enthusiastically devoted to his nautical calling, he was consequently one of the best navigators on fresh water. It seemed that in his case the "ruling passion was strong in death," for his last words are said to have been, "Eight bells; do you hear below there?" While these words indicated that the captain was still "on deck" they also signified that the hour had come when he was to be relieved of duty that he might "turn in" for a final rest.

Captain Larned was father of Mrs. Captain George A. Brown, wife of the commander of the steamer Jay Cooke.

The funeral was held at his late home on Saturday, the 13th.

MACHINERY OF S.S. ETRURIA.

To the Editor of the Marine Record:

Following are the dimensions of the machinery, etc., of the Cunard royal mail steamship Etruria: Diameter of propeller, 24 feet 6 inches; pitch, 33 feet; expanded area, 223 square feet; weight of propeller complete, 57 tons; total length of shafting, 160 feet; diameter of crank shafts, 25 inches; diameter of tunnel, 24 inches; diameter of propeller, 27 inches; total weight of shafting, 170 tons; dias of cylinder 1-71 by 2-105; stroke, 6 feet; width of guides, 36 inches; dias of piston rod, top 9¾, bottom, 11¾; crank shafts built of steel; weight of each, 27 tons; total, 81 tons; number of boilers, 6, double ended; number of furnaces, 72; total heating surface, 38,000 square feet; 53 engines of different kinds on board; carries 110 lbs. of steam to square inch; burns 290 tons of coal daily; employs 110 firemen and coal passers; speed of ship, 19 knots.

The whole of the above ponderous machinery is run under the careful superintendence of Chief Engineer John Vass, of Booth, Liverpool, who is a man of great experience and merit.

[*Around the Lakes Continued from 1st Page.*]

DETROIT.

Special to the Marine Record.

March 16.—So far the present month we have had the most changeable March weather on record for the past thirty years, but withal the most encouraging for an early opening of navigation. The river to Lake Erie and as far as Bar Point is entirely free from ice, and navigation was resumed between Detroit and Malden by the arrival, on yesterday morning, of the steamer Riverside, Captain John Edwards, from the latter port. The steamer City of Dresden has also been plying between Windsor and Malden, and will extend her trips to Leamington as soon as ice permits. Last year boats commenced running on the same route April 6.

The vexed difficulty between the ship carpenters and shipbuilders at this point has finally been amicably adjusted. On Saturday it was given out that the men would all return to work on Monday morning, but on a visit to the Detroit drydock yesterday, the same silence prevailed as during the whole interval. On inquiry, however, it was explained that a temporary hitch had intervened but that this had been overcome and work was resumed Tuesday morning. Without going into a lengthy detail the compromise has been effected, as follows: The whole difficulty, it would appear, had arisen through mistaken ideas of the subject, but when observed in their true light, there was no trouble in arriving at a solution. Mr. McVittie, of the Detroit Drydock Company, made the following propositions: The men of late employed were offered twenty-five cents per hour and eight hours to constitute a day's work, and it required to work ten hours to receive the extra twenty-five cents per hour, and for over that time fifty cents per hour. If the eight hours a day is established by shipyards at Cleveland, Buffalo and other principal yards around the lakes, the Detroit Drydock Company will also adopt it. The men will receive their pay weekly, and the old system of holding back a week's pay has been done away with. These arrangements are to continue in force until January 1, 1887. The hitch which took place yesterday was in regard to the taking of small contracts by outside jobbers below drydock rates, but this was easily arranged to the satisfaction of all concerned.

It was stated that the Trenton ship carpenters struck yesterday for the same rates given by the shipyards at Detroit.

One of the large railway steamers was taken into the Detroit drydock on Saturday and with the assistance of the crew who are nearly all mechanics, and under the guidance of the foreman of the yard, the work was carried on without outside help and the steamer released the day following.

The steambarge Ogemaw was taken into the Detroit drydock yesterday for general overhauling.

Captain H. G. Blanchard's fleet is laid up at Trenton and is in good shape for business, needing no repairs beyond what is usually required.

Captain M. W. Humphrey has sold his steambarge, George A. Marsh to Escanaba parties, the price paid said to be $4,000. She is 95 tons burden, and was built at Sandusky by Monk in 1879.

The steambarge Coral was purchased at Windsor by Captain Titus on Friday for $2,000. She has been twenty-six years in service and is 52 tons burden.

The decision which for some time past has been anxiously looked for, was rendered yesterday by Judge Brown in the United States district court, and was between John Delaney and Wm. McCarthy against Captain S. B. Grummond, owner of the tug Winslow. The incidents thereto were briefly alluded to in a former letter. The plaintiffs, with others, were employed in releasing the schooner Wyandotte, stranded at or near Oscoda, Lake Huron. The hawser parted and struck McCarthy and Delaney and seriously injured them. They brought suit for $10,000 damages. Judge Brown dismissed the case, averring that the carelessness was on the part of the plaintiffs.

Captain James Reed, of St. Ignace, was in this city on Friday and returned home on Saturday. As he traveled by rail, wind and weather were no detriment to the voyage either way.

George L. Colwell, vessel owner, was drifting to and fro in the city on Monday. His winter moorings are at Harrisville, which borders on Saginaw Bay.

Captain Grummond's office is being very tastefully refitted and furnished and will be adorned with new surroundings.

A suit has just been entered at the Sandwich court, opposite this city, against the propeller St. Magnus, and is now on trial for sinking the tug Bob Hackett at or near Malden last fall.

It is sometimes essential to look abroad for local news, which, as frequently is the case, borders on the ridiculous, as set forth in a Sarnia, Ontario, newspaper by an individual who assumes no initials, and dispatches marine hash from this city. He makes the announcement that the steam ferry boat Fortune has been purchased by parties in that berg and will ply as an opposition boat between that place and Port Huron. The Fortune is owned by the Detroit, Belle Isle & Windsor Ferry Company, and when informed yesterday they were astounded by so ridiculous a statement.

It has somewhere been stated that Captain Eber Ward will have no steamers plying this season on the Buffalo & Green Bay route. It would be w ll enough to go slow on such assertions, at the present, as the captain said yesterday that no final conclusions had yet been arrived at.

Navigation has been resumed on the St. Clair river between Port Huron and Marine City, the steamer Mary taking the route somewhat earlier than last year.

A suit has for years been in litigation in the superior court this city, arising from a collision between the steam yacht Mamie and the ferry steamer Garland, on the Detroit river, by which several lives were lost, and the issue at present is a garnishee to recover damages awarded some time ago. The contention on either hand has been fought desperately, and the outcome looked forward to with much interest.

The prospect of an early navigation in the upper lake region is considered very favorable. The ice in the Straits is said to be only sixteen inches and is weakening, while around the Beavers it has broken up and at Prentiss Bay it has entirely disappeared.

As regards charters beyond what has already been given, nothing appears to be doing at present. Generally speaking all seem encouraged with present prospects.

HALL.

TOLEDO.

Special to the Marine Record.

Captain George Sheldon has gone to Marine City to get in order Russell's dredges, which he has bought an interest in.

Captain D. L. Boyce, of the schooner R. Hallaran, arrived from Henderson, N. Y., last week.

Captain James Shelden will command the tug Wells, of Marine City this season.

The ice in the Maumee river is very rotten and in a great many places clear water is seen, so if we can get a few days of warm weather the ice will vanish and the river will be clear again.

E. Doville, of Cleveland, and Ward Cook, of Sodus, were in the city last week looking after the sand interest and the steambarge Commerce.

J.

ERIE.

The following is a list of the Anchor line captains, which, it is stated, have been appointed to run the boats of the company during the coming season: Schuylkill, Captain Blair; Gordon Campbell, Captain Sisson; China, Captain Neyland; Alaska, Captain Wilson; Delaware, Captain Christy; tug Erie, Captain E. Thompson: Juniata, Captain Walsh; India, Captain Mooney; Arizona, Captain Dunn; Allegheny, Captain Plumb; Sherwood, Captain McCarty; Japan Captain Robert Smith; Winslow, Captain William Smith; Wissahickon, Captain Todd; Lycoming, Captain Joseph Corcoran; Philadelphia, Captain Riley; Conestoga, Captain Fred Riley; Lehigh, Captain George Hogg; Clarion, Captain Gardner; Anna Young, Captain O'Neill; Conemaugh, Captain Rider.

MARINE CITY.

Special to the Marine Record.

The barge C. Spademan, Captain M. P. Scott, has received new bulwarks, stringers under the rail, a number of new stanchions and a new main mast.

George Koenig, shipbuilder, has put forty feet of new rail, and bulwarks and stringers on the port side amidships, and some spring beams in the hold of the barge St. Clair. He has done considerable repairs on the Tonawanda Transportation Company's fleet. He is rebuilding a steam dredge for Hubbel & Company, Saginaw, comprising new sides and deck and a general overhauling.

The schooner Louie O'Neil, owned by Robert Holland, will receive all new floor, six tiers of new keelsons, and iron arches on her sides to her rail 18 inches wide by ¾ inche thick; the schooner Wm. Brake recalking and a general overhauling; the steambarge John W. Westcott some calking.

The new steamship, to be built here by Captain Wm. B. Morely, will be 268 feet over all, 30 feet 8 inches beam, 22 feet 6 inches moulded depth.

At David Lester's shipyard the T. & S. T. Company's barge Dayton is receiving new frames, outside planking, deck frames and deck, and a general overhauling.

The T. & S. T. Company's steambarge Tempest has had her engine compounded by Hodge & Company, Detroit.

The steamer City of New Baltimore, Captain J. B. Lozen, has received a thorough overhauling, comprising new run all around, new plank sheer on promenade deck, new engine room, her boiler deck lowered fourteen inches to receive new boiler, and repainted inside and out. She left Marine City for Port Huron last Saturday to have her new boiler placed on board by Love & Schofield, Pioneer Boiler Works.

Conrad C. Lenz, part owner of the steambarge Oswegatchie and schooner G. S. Norris, George F. Flynn, who will be first mate on the steambarge, and Captain P. G. Kaleth, who will command the schooner, all of Chicago, and Wm. E. Phillips, of Watertown, York state, who will be first engineer of the Oswegatchie, are here getting the steambarge and schooner ready for the coming season's work. Captain Wm. F. Mitchell, last year of the schooner City of Sheboygan, who will command the Oswegatchie, is expected from Chicago, this week.

The steamer Mary made her first trid from Marine City to Port Huron and back on Saturday, the 13th. Captain S. H. Burnham is in command, George Merrill first engineer, S. E. Pearce clerk. She is now making daily trips.

Frank Hart sold his one half interest in the barge Alice Richards to Captain John Jones for $3,500. Captain Jones will sail her.

The steambarge Lowell, Captain Charles H. Westcott, is receiving extensive repairs to her boiler and is being fitted out and painted.

Chris Peterson will command the T. T. Company's barge Reindeer.

Charles Love, formerly second engineer of the T. T. Company's steambarge Edward Smith, will be first engineer on her this season, Engineer Wm. F. Sanborn having given up that position and become general manager of the Marine City Salt & Brick Works. There are no other changes in the officers of T. T. Company's fleet.

Captain Henry Donaldson, formerly first mate of the steambarge D. Leuty, will command the tug Music. Captain John Atwell, formerly mate of the steambarge Nahant, will go mate with him.

WILLIAMS.

ST. CLAIR.

Special to the Marine Record.

The steambarge Kalkaska, Captain H. Fish, is being fitted out ready for business. She will have the same officers as last season.

The steamship Siberia, Captain W. W. Morse, had the ice cut out around her on Monday, so as to be ready for the Conger to tow her to Port Huron, where she will take on a load of wheat at McMorans elevator. She will be Officered as follows; Captain W. W. Morse, commander; Geo. M. Wise, first engineer; Wise (brother of the first) second engineer; L. Powell, formerly of the Sparta, first mate; O. A. Maxwell, second mate.

The schooner N. P. Goodell, Captain T. Finny is receiving some new deck, stanchions and rail forward, new knight heads and cat heads and some new deck, frames and stanchions aft.

Capt. John Pringle's new steambarge will be named the Simon Langel, after her worthy builder. She is a splendid, strong built, handsome vessel, and as good as any ever placed on the stocks around our lakes.

The steambarge Rhoda Stewart has received a new stem and some new hatch combings.

WILLIAMS.

ALGONAC.

Special to the Marine Record

The schooners Bloom and Plymouth will tow with the steamship Siberia the coming season. They are chartered to convey iron ore from Ashland to Chicago and Lake Erie ports at $1 20 per ton. Captains S. A. Lyons will command the Bloom, Captain Paul Revard the Plymouth, and Captain Harrow will be general manager of the tow.

The schooners J. G. Masten and Bay City, and the tugs Spratt and Lark, are being rebuilt.

WILLIAMS.

PORT HURON.

Special to the Marine Record.

Love & Schofield, boiler makers, have completed a marine boiler 6 feet 6 inches diameter, 11 long, of 7-16 steel, for the steamer City of New Baltimore. J. E. & W. F. Botsford, owners of the propeller Roanoke, give the firm much praise for the excellent boiler built by them for the Roanoke last season and say that she ran on a trip of 28 days duration on 159 tons of soft coal, about 5½ tons per diem.

The Phœnix Iron Works Company are rebuilding the engine and machinery for the steamer Nellie, of Mt. Clemens, and doing extensive repairs on the engine and machinery of the steambarge Yosemite, at this port.

There was a slight error in my Port Huron news last week. It should have been that the schooner Alverson had nearly 55,000 bushels of grain on board instead of nearly 50,000.

The steambarge Morley will undergo a general overhauling and repairing to class her for carrying iron ore, at Dunford & Alverson's shipyard as soon as she can be got along from Detroit. The steambarge Bay City will also get a general overhauling and repairing by them on her arrival from Cleveland, where she is laid up.

The boiler built by Love & Scofield was placed on board the steamer City of New Baltimore at Captain Fitzgerald's derrick Tuesday afternoon.

The Conger got on a new wheel in Dunford & Alverson's dock, and left for St. Clair Tuesday afternoon to tow the steamship Siberia to this port.

Wm. Le Blane, boat builder, is building four yawl boats for the Tonawanda Barge Line Company, two of them for the new steambarge building at Mt. Clemens and one each for the barges Fulton and Elvina.

WILLIAMS.

KINGSTON.

The Canadian engineers will ask the government to allow vessels to pass through the Welland Canal until 6 o'clock Sunday mornings and after 6 Sunday evenings.

The propeller Ocean has been purchased by Sylvester Neelon. She will be commanded by Captain Towers and run in opposition to the Persia next season.

Captain J. H. Scott left last Wednedays morning for St. Catharines, to fit out the steamer Persia.

DULUTH.

The Herald says a meeting was held in Duluth last Friday and a company organized to be known a the Duluth Dock Company and which has a paid up capital of $100,000. The company is officered as follows: E. D. Cummings, president; G. G. Hartley, vice president; F. W. Farnham, secretary; W. O. Hughart, treasurer; and J. B. Howard, general manager. The board of directors consists of G. G. Hartley, J. B. Howard, W. O. Hughart, Duluth, F. W. Farnham, Brainard, E. D. Cummings, St. Paul. The dock will have a frontage of 500 feet and its width will be about 150 feet. It will be devoted to the use of all boats and is considered a long felt want.

Captain Joseph Lloyd has returned from Chicago. The captain settled his differences with the owners of the steamer Queen of the Lakes and completed her purchase. She will be brought to Duluth at the earliest opening of the lake and will be used almost exclusively for excursions. Captain Lloyd says he never in all his experience as a mariner stepped adeck of a more perfect boat in every respect than the Queen. He cannot understand why some people should seek to injure his business by speaking in derogatory terms of his new boat but says he will not undertake to convince people to the contrary by what he might say, but will submit the boat for the public's approval when she arrives in the harbor.

CHEBOYGAN.

The Algoma, after making minor repairs resumed her trips across the Straits without difficulty. This she has never done successfully until this winter. The ice has not packed in, and is not very thick. Teams are very cautious in crossing it.

Considerable snow fell Monday night and Tuesday, but this is probably the forerunner of a general break up. The weather is mild, and the snow is disappearing rapidly.

HISTORY OF LAKE NAVIGATION.

BY J. W. HALL.

Written for the Marine Record.

CHAPTER LI.

In 1862 steamer Ocean, a once popular boat, plying between Buffalo and Detroit, was taken to Trenton, her engine taken out and placed in a new hull named the Morning Star.

The steamer Southern Michigan, which had been lying sunk at Monroe, was raised in midsummer, towed to Buffalo, her engine taken out, and then shipped to New York. The tug John Martin, Captain Joe Waltman, and Thomas Fitzpatrick engineer, towed her to Buffalo at $100 per day.

A freshet took place in the Genesee river, forcing the steamer Maple Leaf from her winter moorings into Lake Ontario with only her captain on board. The schooners Col. Cook and Minnesota shared a like fate, but all soon after got into port again but little harmed.

The propeller Stockman, built for the fishing trade, and for a time on passenger routes, was this season converted into a tug.

Seamen's wages commenced early in the season at $1.00 a day, advanced to $1.25 and in April to $1.50, dropping to $20 00 a month and remained at that figure during the summer months.

The old steamer Sultana, at one time a popular lake boat, was converted into a lumber barge at Detroit, and renamed the Cumberland, commanded by Captain R. M. Coon.

The iron steamer Mohawk, formerly a British revenue boat, was bought by Mr. Hickey, of Chicago, and plied between that city and St. Joseph.

The barques Northwest and Oneonta had a trial of speed between Chicago and Buffalo. Both vessels passed through the rivers in the same tow, but the latter succeded in reaching Buffalo first.

The barque Sleipner, from Bergen, Norway, Captain Waage, arrived at Detroit August 24, en route to Chicago with one hundred and five passengers on board.

The barge St. Lawrence, formerly the steamer of that name, passed through the rivers from Saginaw, September 1, having on board 1,150,000 feet of lumber for Buffalo, the largest cargo up to that date.

The schooner Oriole, Captain McAdam, laden with ore, collided with the steamer Illinois and sunk, with loss of twelve lives, including the captain, his wife and mother-in-law.

The barque British Lion arrived at Detroit, wire rigged, the first with a wire fitout on the lakes, Captain R. Gaskin master and owner.

During the month of June lake freights from Lake Michigan ports on wheat to Buffalo were 10c. per bushel, but soon after fell to 9c.

Tugs got from $25 to $35 per vessel for towing from Lake Huron to Lake Erie.

The tug Oswego was sold at Detroit to New York parties and took her departure for that city June 11.

The tug E. M. Peck carried the broom on the rivers, claiming a superiority of speed over all others.

The steamer Bay City, formerly the Forest City, was overtaken by a storm near Colchester, Lake Erie, and became a total wreck at the clay banks.

The United States schooner Lamplighter was sold at auction in Detroit to Captain A. Redwick, of Chicago, for $1,840.

The following schedule of freights prevailed until the fall season of 1862 from the ports named: Wheat, Detroit to Buffalo 4c., Detroit to Oswego 7c. Lumber, Detroit to Buffalo $2.25, Saginaw to Buffalo $4.50, Saginaw to Chicago $2.25, Saginaw to Detroit $2.25. Staves from Lake Huron to Buffalo, pipes $14 per thousand, hogsheads $12. Port Huron to Buffalo, pipes $12, hogsheads $10. Wheat from Milwaukee and Chicago during October ruled at 9c. per bushel.

A singular freak of lightning occurred on board the schooner Fortune on the night of May 1, on Lake Erie. The crew were engaged in making sail immediately after a heavy thunder squall. John Corbett, first mate, with the crew was at the fore halyards on one side of the mast, and Neil Duncan, second mate, was on the opposite side, also aiding in making sail. A bolt of lightning killed both mates, but strange to say, none of the rest of the crew were harmed. The mates were not more than three feet apart.

The schooner Sirius, laden with oil, took her departure from Detroit September 11, for Liverpool, and was wrecked at Farther Point October 20.

The barque Thomas F. Park, Captain Wm. McLeod, departed from Detroit for Liverpool, laden with oil, October 22, but on reaching Quebec her way was obstructed by ice, and there she went into winter quarters.

The tugs Magnet and G. H. Parker conveyed from Lake Huron to Buffalo, passing Detroit September 4, a raft, which contained 4,000,000 feet, and was successful throughout in the transfer.

The lights at St. Clair flats were extinguished December 1, and navigation closed on the 20th.

The following craft passed out of existence and were total losses during the season of 1862:

Steamer North Star, burned at Cleveland, $80,000.

Steamer Bay City, wrecked at clay banks, Lake Erie, $10,000.

Steamer Kalloolah, lost at Sanguin, Lake Huron, $16,000.

Propeller Pocahontas, lost on Long Point, Lake Erie, $25,000.

Propller Euphrates, lost on Sandusky Bar, $41,000.

Propeller B. F. Bruce, burned near Port Stanley, $9,000.

Propeller Moira, sunk off the Ducks, Lake Ontario, $12,000.

Propeller General Taylor, lost at Sleeping Bear, $30,000.

Propeller California, wrecked on Mohawk reef, Lake Erie, $12,000.

Propeller Bay State, foundered in Lake Ontario and twenty-two lives lost, $65,000.

Tug Zouave, explod d in Lake St. Clair and four lives were lost, $8,000.

Tug Union, exploded off Chicago and three lives lost, $6.000.

Tug Tom Cochrane, wrecked on Point Abino, $6,000.

Bark Ogontz, wrecked at Chicago, $10,000.

Bark Northern Light, wrecked at Port Burwell, $10,000.

Schooner Rapid, sunk by schooner Narragansett in Lake Erie, one life lost, $19,000.

Schooner Pacific, lost at the Humber, Lake Ontario, $3,000.

Schooner Souvenir, foundered in Lake Michigan and four lives lost, $3,000.

Schooner S. H. Lathrop, sunk by bark Sturgess in Lake Erie, $16,000.

Schooner Convoy, sunk by bark Sam Ward in Lake Erie, $17,000.

Schooner Oriole, sunk by steamer Illinois in Lake Superior and twelve lives were lost, $15,000.

Schooner Cadet, foundered in Lake Erie with loss of six lives, $4,000.

Schooner Zephemia, foundered in Lake Ontario, crew saved, $12,000.

Schooner Sierius, wrecked at Farther Point, St. Lawrence, $11,000.

Schooner Christiana, wrecked on Lake Ontario, $10,000.

Schooner Flora Watson, sunk by schooner H. Ross in Lake Erie, $25,000.

Schooner Ontonagon, wrecked near Oswego, $25,000.

Schooner Lucy Raab, wrecked at Middle island, Lake Huron, $20,000.

Schooner Chief Justice Marshall, wrecked near Barcelona, $4,000.

Schooner Postboy, lost near Dunkirk, $3,000.

Schooner A. Moulton, wrecked in Lake Ontario, $6,000.

Schooner Mary Ann, wrecked in Lake Ontario, $6,000,

Schooner Condor, lost on Lake Michigan, $20,000.

Schooner C. Reeve, sunk by schooner Exchange in Lake Erie, $25,000.

Schooner Bridget, wrecked on Long Point, Lake Erie, $10,000.

Schooner Helen Mar, wrecked at Oak Orchard, Lake Ontario, $11,000.

Schooner Mary, foundered in Lake Ontario with loss of five lives, $5,000.

Schooner Monarch of the Glen, foundered in Lake Erie, and six lives lost, $2,000.

Schooner Excelsior, lost at Port Stanley, Lake Erie, $4,000.

Schooner Lady of the Lakes, wrecked at Manistee, $20,000.

Schooner Huntress, wrecked at Port Maitland, Lake Erie, $9,000.

Schooner A. Stowell, lost near Sodus, Lake Ontario, $8,000.

Schooner Stephen A. Douglass went down in Lake Michigan, $25,000.

Scow Rugby, lost on Lake Erie with seven lives, $4,000.

Scow Forest Chief, wrecked at Cleveland, $3,000.

Scow Lily, lost off Vermillion with one life, $2,000.

Brig Ocean Eagle, wrecked at Sheboygan, $15,000.

Brig Black Hawk, lost at Point Betsy, $15,000.

Total loss on hull and cargo, $1,162,173; number of disasters, 300; lives lost, 154.

The record of deaths among lake masters in 1862 is by no means complete and could not be obtained at the time of making up the record. We note the following:

April 18, Captain John Eastwick died at Buffalo, aged 44 years.

April 18, Captain John Fleeharty, pioneer steamboat man, commencing in 1832, died at Buffalo, aged 68 years.

May 22, Captain Hugh Black, lost from schooner Rapid in Lake Erie, aged 58 years.

May 25, Captain M. W. Lee, killed by an explosion of the tug Zouave in Lake St. Clair, aged 36 years.

August 9, Captain McAdam, lost with schooner Oriole in Lake Superior, aged 37.

August 24, Captain R. G. Evans, of the steamer Ocean, died at Detroit, aged 52.

September 2, Captain Timothy Dailey, killed by explosion of the tug Union, aged 40 years.

October 25, Captain Vere Stenton, of brig Ocean, killed by falling into a lock on Welland canal, aged 42. Also, Captain George E. Willoughby died in Quebec, aged 42, and Captain Thomas Smithers died at Detroit, aged 34, date not known.

OFFICIAL NUMBERS AND SIGNAL LETTERS.

TREASURY DEPARTMENT, BUREAU OF NAVIGATION, WASHINGTON, March 8, 1886.

To the Editor of the Marine Record:

Following is a list of merchant vessels of the United States to which official numbers and signal letters were assigned by the Bureau of Navigation, Treasury Department, during the two weeks ended March 6, 1886:

Official Number.	Signal Letters.	Rig.	Name of Vessel.	Tonnage. Gross.	Tonnage. Net.	Home Port.
			SAIL VESSELS.			
106,400	K D G L	Sc.	Agnes Manning,	875 76	832 86	Perth Amboy, N J.
106,401	.....	Sc.	Adelia,	31.05	29.50	San Francisco, Cal.
81,106	.....	Sl.	Wm. M. Ward,	12.02	11.42	Tappahannock, Va.
161,549	.....	Sl	Venture,	24 49	23.27	Astoria Ore.
			STEAM VESSELS.			
106,402	.....	St. s	Abraham Anspach.	15 53	15.53	Charlevoix, Mich.
155,122	.....	St. p.	Old Point Comfort,	643 90	643 99	Wilmington, Del.
116,086	.....	St. p	Sherrard,	23 92	23 92	Wheeling, W. Va.
91 822	...	St. s.	Minerva,	38 05	11.52	Philadelphia, Pa.

JARVIS PATTEN, Commissioner of Navigation.

RECIPROCITY IN PASSENGER TRAFFIC—THE SHIPPING BILL.

A Washington correspondent writes as follows: The Dingley bill of the present congress has just passed the house. It will remove something over $300,000 a year from the shipping of the country, and while largely beneficial to the general commercial interests, will give some special relief to the shipping of the lakes and the St. Lawrence. One section of this bill touches the passenger traffic upon the St. Lawrence in the interest of American carriers. A fine of one dollar per passenger will, under this bill, be levied upon every passenger landed who is carried by a foreign vessel from one port in the United States to another. The object of the provision is to take such a position in regard to this carrying trade, that Canada will see the importance of a fair reciprocity. If the Canadian government will be willing to arrange for a permanent or continuing privilege to American vessels to take up and put down passengers from one Canadian port to another, the same rights to Canadian boats on the American side would be freely granted; but so long as the present unjust and offensive rule is insisted upon by our neighbors on the other side, it is due to ourselves to provide and enforce a penalty that will bring about an adjustment or an equality.

It was understood by many on the St. Lawrence last summer that the regulation put in force requiring lights on row boats, had its origin in the treasury department. This view is not strictly correct. A statute was passed by congress in 1871 which provided for lights. In the revision the requirement appears in rule 12 of section 4233, and so far as applicable is that "fishing boats, or other water craft navigating in rivers by hand power or otherwise, shall carry one or more good white lights which shall be placed as shall be prescribed by the board of supervising inspectors of steam vessels." The regulation complained of was the prescribing by the inspectors of the placing of the light, but as the statute implied a duty on their part to prescribe, neither the inspectors nor the treasury department should be criticised for carrying out the statute. An effort will be made to amend the statute in this respect in the law before mentioned. A suggestion has been made to require the carrying of a light after sundown, but to allow it to be hooded except when in the main steamboat channel, or in the track of an approaching steamboat.

While the Dingley bill to relieve vessels from certain charges was being discussed in congress recently, Mr. Parker, of New York, spoke in favor of the measure as a limited movement in the right direction. In the course of his remarks he said: "When I see that a single tow of a half dozen barges, coming across the St. Lawrence river to bring freight from Canada to New York, is compelled to pay a tax of $2.50 on every barge to the consular office at the port of shipment as often as the tow may come across, sometimes being four or five times a week, I understand that there is something wrong in our shipping laws which makes such a tax possible. Also, Mr. Chairman, when I see the wreckers of Canada allowed to go into our northern rivers and lakes where an American vessel may be wrecked, and assume the privileges and benefits of removing freight and raising the wreck in our waters, while aid to American vessels by American wreckers is prohibited in Canadian waters; when we see an American vessel, wrecked in Canadian waters, even though convenient to our ports or shores, prohibited from receiving aid from an American wrecker, but must be allowed to go to pieces with the destruction of the vessel and cargo while waiting till assistance can be obtained from a Canadian wrecker, I submit that when such a state of things as this exists we must recognize the fact that some reform is needed in our shiping laws. And so I might call attention to many other provisions in which the law is in need of amenament. The theory of our legislation seems to have been to tax ships and tax commerce and tax business wherever it could be reached in these relations, while upon the other side of our northern rivers and the great lakes, Canada, following the course of Great Britain in this direction, has made its shipping practically free. Their charges are nothing, and the government supports in every possible way the shipbuilding and the shipowning interests of Canada. Therefore, while I am ready and glad to support this bill, and will not interfere to embarrass it in any manner, I yet hope that the committee having these matters in charge will so continue their labors as to give further assistance in regard to this important branch of our national interests."

COLLISION BULKHEADS.

There is still much room for ingenious improvement in the construction of iron steamers or vessels, so as to render them practically unsinkable even after collision, or partial injury to their hulls by striking upon banks or rocks, without thereby rendering the vessel commercially unfit for its purpose, by excessive subdivision or expensive construction. As matters now stand this may appear to be an impossibility, but the history of invention has always been that it is the scope of ingenious inventors to surmount that which appears at first sight to be an impossibility. There is much humbug extant in the commercial marine generally, as to the protection afforded by the only attempt hitherto made in this way by the use of transverse bulkheads. Practically there are very few, if any, commercial steamers or vessels divided into anything like a sufficient number of water tight compartments, so as to insure buoyancy after collision or partial damage to the hull The chief exception that can be made to these criticisms is with regard to the present generally adopted construction of fore peak, which is now invariably parted off from the hull of the vessel by a bulkhead sufficiently near to the stem of the vessel to prevent foundering from an accident to the bow of the vessel. It must be remembered, however, that it is very seldom, if ever, that two vessels collide both stem on. One or other of the vessels usually receives the damage somewhere in its quarters or sides, resulting in almost certain destruction to the vessel. There can be little doubt that a large percentage of the unexplained losses of merchant steamers may be put down to collisions in which both vessels founder, and of which, therefore, no account ever reaches us.

It would be a great gain to the safety of our commercial marine generally, and to the nation at large by the additional security from total loss that would be conferred, if something like a reasonable method of construction could be adopted, by which damage to any part of the hull could be localized to such an area or volume as would not dangerously affect the buoyancy of the whole vessel. Of course the commercial objections to any such system as would first present themselves to the constructor are most serious and obvious. The cargo accommodation of a steamer so provided would, at first sight, be thereby hopelessly impaired. It must be remembered, however, that the ideas hitherto developed in this direction are very limited in their nature and seem to be almost entirely confined to the subdivision of the hull by transverse bulkheads. Is it not possible that more attention to the possibility of longitudinal, horizontal, or diagonal subdivision might materially reduce the disadvantages of such a system? Again, might it not be possible for such subdivisions to be effected to such a degree after the cargo has been stowed, as to leave the largest space available for stowage and removal of cargo whilst subdivision might be effected when in transit? As the construction of bulkheads is at present carried out, much criticism also may be fairly given upon the absurdity of such bulkheads being insufficiently strong to carry the water pressure for which they are designed in case of accident. It must be remembered that when called upon to fulfill their purpose of giving buoyancy to a vessel they are to all intents and purposes fulfilling the same function as the huil, and must, therefore, represent considerable resisting power. Frequent reports as to the action of collision bulkheads after damage to the stem of the vessel have shown that it is usually only with the greatest difficulty and with considerable shoring that the collision bulkheads can be made to carry the necessary water pressure. Their flat form renders them exceptionally weak in their capabilities of resistance, but we do not know why flat bulkheads should be so universally adopted, as we see no serious objection to make them curve convexly to the axis of the vessel. This would render them much stronger than could ever be the case with flat bulkheads for carrying pressure on the concave or convex surface.—*London Marine Engineer.*

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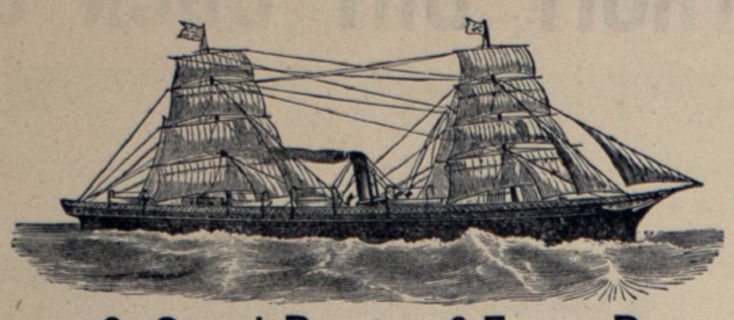

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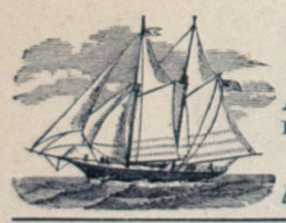

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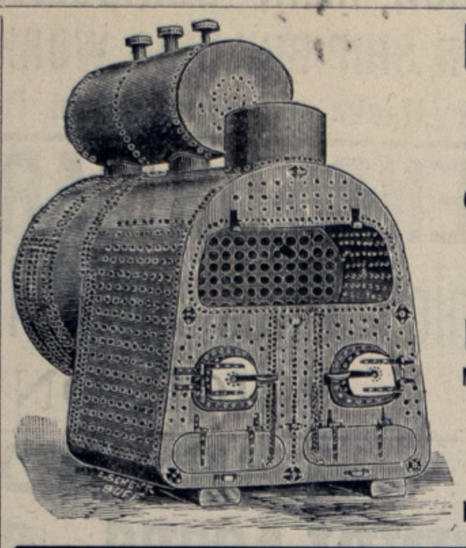

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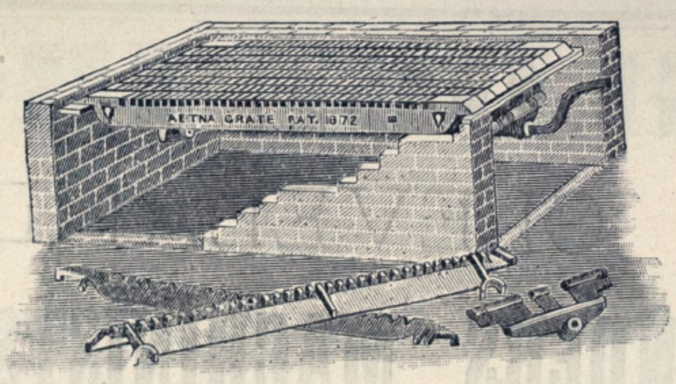

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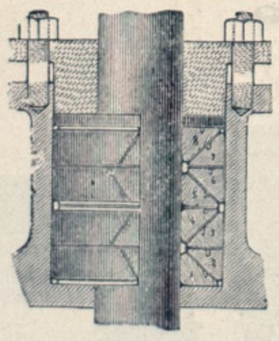

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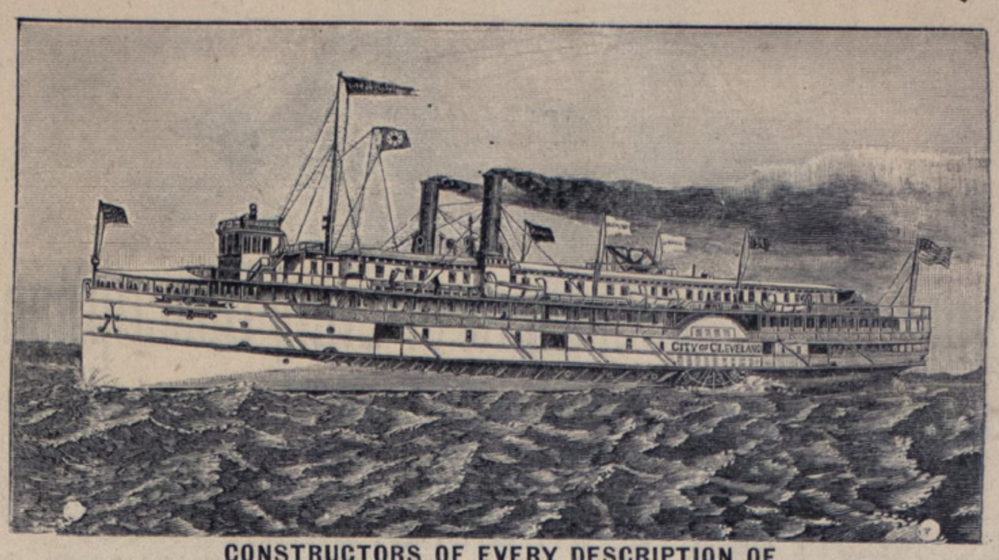

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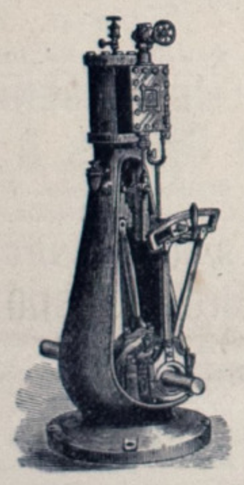

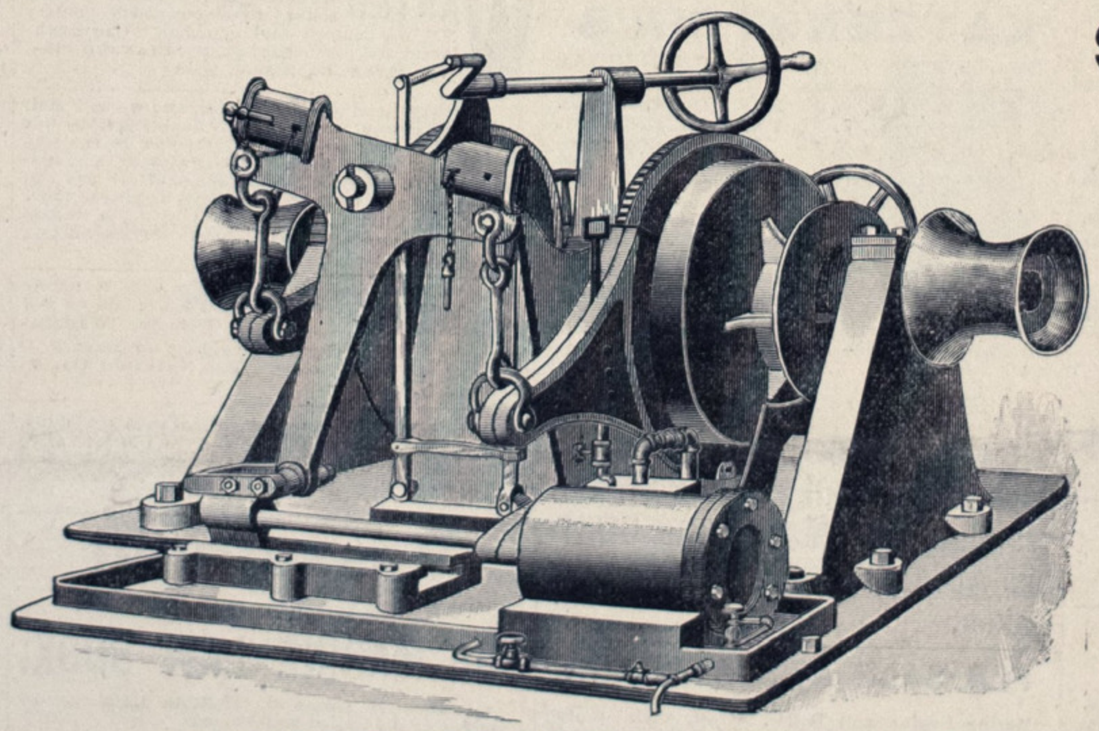

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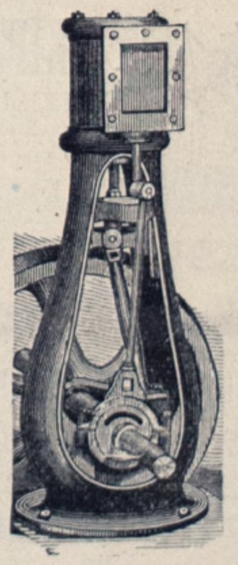

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